

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. – 20. (Cancelled)

21. (Currently Amended) A chimeric polypeptide comprising two or more antigenic polypeptide fragments of a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:2, wherein the two or more antigenic polypeptide fragments each comprise at least 15 contiguous amino acids of SEQ ID NO:2 and are linked so as to form an immunogenic chimeric polypeptide, wherein the ~~chimeric polypeptide elicits two or more antigenic polypeptide fragments elicit~~ an antibody that specifically binds to the polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2, and wherein the two or more antigenic polypeptide fragments induce an immune response against *Streptococcus pyogenes*.

22. (Cancelled)

23. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or adjuvant and an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the full-length amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2, and wherein the isolated polypeptide induces an immune response against *Streptococcus pyogenes*.

24. (Previously Presented) A pharmaceutical composition comprising the chimeric polypeptide of claim 21 and a pharmaceutically acceptable carrier, diluent or adjuvant.

25. (Withdrawn) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 23.

26. (Withdrawn) The method according to claim 25 wherein the host is a neonate, an infant, a child, an immunocompromised host, an adult, or an elderly person.

27. – 29. (Cancelled)

30. (Withdrawn and Currently Amended) A method for prophylactic or therapeutic treatment of ~~*S. pyogenes*~~ *S. pyogenes* infection in a host susceptible to ~~*S. pyogenes*~~ *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 24.

31. (Withdrawn) The method according to claim 25 wherein the *S. pyogenes* infection is pharyngitis, erysipelas, impetigo, scarlet fever, bacteremia, or necrotizing fasciitis.

32. (Withdrawn) A method for diagnosis of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising:

- a) obtaining a biological sample from the host;
- b) incubating an antibody or antigen-binding fragment thereof that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2 with the biological sample to form a mixture; and
- c) detecting specifically bound antibody or bound antigen-binding fragment in the mixture which indicates the presence of *S. pyogenes* in the host.

33. (Withdrawn and Currently Amended) A method for the detection of antibody specific to *S. pyogenes* in a biological sample containing or suspected of containing said antibody comprising

- a) obtaining the biological sample from a host;
- b) incubating the biological sample with an isolated polypeptide to form a mixture, wherein the isolated polypeptide is selected from (i) an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the full-length amino acid sequence set forth as SEQ ID NO:2; (ii) an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the full-length amino acid sequence set forth as SEQ ID NO:2; and (iii) an isolated polypeptide that comprises the amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide is capable of eliciting an antibody that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2; and
- c) detecting specifically bound polypeptide in the mixture which indicates the presence of antibody specific to *S. pyogenes* in the sample.

34. – 35. (Cancelled)

36. (Currently Amended) A kit comprising an isolated polypeptide for detection or diagnosis of *Streptococcus pyogenes* ~~*S. pyogenes*~~ infection, wherein the isolated polypeptide is selected from (a) an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the full-length amino acid sequence set forth as SEQ ID NO:2; (b) an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the full-length amino acid sequence set forth as SEQ ID NO:2; and (c) an isolated polypeptide that comprises the amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide is capable of eliciting an antibody that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2.

37. (Currently Amended) A kit comprising the chimeric polypeptide according to ~~either claim 21 or claim 42~~ for detection or diagnosis of *S. pyogenes* infection.

38. (Currently Amended) The pharmaceutical composition of claim 23 wherein the isolated polypeptide consists of an amino acid sequence at least 95% identical to the full-length amino acid sequence set forth as SEQ ID NO:2.

39. (Previously Presented) The pharmaceutical composition of claim 23 wherein the isolated polypeptide consists of the amino acid sequence set forth as SEQ ID NO:2.

40. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or adjuvant and an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the full-length amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2, and wherein the isolated polypeptide induces an immune response against *Streptococcus pyogenes*.

41. (Previously Presented) The pharmaceutical composition of claim 40 wherein the isolated polypeptide comprises the amino acid sequence set forth as SEQ ID NO:2.

42. (Currently Amended) A chimeric polypeptide comprising a polypeptide ~~consisting of an amino acid sequence at least 90% identical with the amino acid sequence set forth as SEQ ID NO:2, or an antigenic fragment of the polypeptide, wherein the antigenic fragment that~~ consists of at least 15 contiguous amino acids of SEQ ID NO:2, and wherein the chimeric polypeptide~~antigenic fragment~~ elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2, and wherein the antigenic fragment induces an immune response against *Streptococcus pyogenes*.

43. (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or adjuvant and the chimeric polypeptide of claim 42.

44. (Withdrawn) A method for inducing an immune response against *S. pyogenes* in a host, said method comprising administering to the host the composition according to any one of claims 23 and 38-41.

45. (Withdrawn) A method for inducing an immune response against *S. pyogenes* in a host, said method comprising administering to the host the composition according to either claim 24 or claim 43.

46. (Withdrawn) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to any one of claims 38-41.

47. (Withdrawn) The method according to claim 46 wherein the *S. pyogenes* infection is pharyngitis, erysipelas, impetigo, scarlet fever, bacteremia, or necrotizing fasciitis.

48. (Withdrawn) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 43.